

# IMPLEMENTING THE GREAT IDEAS IN FINANCE

Investment managers have access to the same academic studies. The difference comes down to determining what can be useful for investors and how to apply those insights in live strategies.

At Dimensional, we've been implementing the great ideas in finance for nearly 40 years. Our investment approach is grounded in economic theory and backed by decades of leading academic research. ►



**GERARD K. O'REILLY** Co-Chief Executive Officer and Chief Investment Officer

 Not all academic research is useful for clients. We want good ideas that we can structure and implement as strategies."

### LEADING THE TRANSFORMATION

The field of finance has undergone a transformation since the early 1960s, when computers made it possible to process large amounts of data for academics to study. Until then, simple things we take for granted today—like calculating a rate of return or comparing performance across strategies—weren't available. Computers also enabled new theories and models to be tested and helped organize the data.

Leading academics dug in and produced groundbreaking work on fundamental concepts like asset pricing, risk, and diversification. Several of these academics—who would later be recognized as Nobel laureates in economic sciences—were involved with Dimensional in its early days and remain closely involved today.

Dimensional's founders were connected to this movement in academia and paved new paths applying these insights to real-world investing. To this day, Dimensional's investment team keeps abreast of academic research from all around the world, and we've chosen to collaborate with some of the best researchers in the field doing pioneering work. Our investment team sets a high bar for research and its application because we want to pursue only those insights that we firmly believe can benefit investors.

What started in 1981 with the first assets entrusted to Dimensional still holds true today—every dollar invested has financial science at its core. Our culture of research, rigor, and the pursuit of truth has contributed to a transformation in the field of finance and continues to propel Dimensional forward in service of clients.

### A heritage of leading research



**Eugene** Fama University of Chicago

Director and Consultant, Dimensional

Nobel laureate, 2013

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**Kenneth French** Dartmouth College

Director, Consultant, and Co-Chair of the Investment

**Merton Miller** 

University of Chicago

Independent Director,

Nobel laureate, 1990

Funds, 1981-2000

Dimensional US Mutual



#### **Robert Merton** MIT

Resident Scientist, Dimensional Holdings, Inc.

Research Committee, Nobel laureate, 1997 Dimensional

Robert Novy-Marx University of Rochester Consultant,

Dimensional



#### Myron Scholes Stanford University

Independent Director, Dimensional US Mutual Funds

Nobel laureate, 1997

• What started in 1981 still holds true today—every dollar invested has financial science at its core.



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## STARTING WITH THE MARKET

History has shown capital markets have rewarded long-term investors. Staying disciplined, particularly in tough times, takes having an investment framework. Our framework centers on market prices. Prices are updated in real time, all the time, and represent the most complete prediction of the future available to us.

Many studies highlight the challenges and costs for investors looking for "mistakes" in prices. Academics have long documented that there's no compelling evidence to suggest that trying to find mistakes in markets has yielded better investment outcomes. This supports our belief that market prices are the best model we have for understanding expected returns.

We think it is possible to have higher returns than the market without having to outguess it by using the market as a starting point and building from there.

# PUTTING FINANCIAL SCIENCE TO WORK

Modern finance has led to many breakthroughs. Effectively using these insights requires organizing research in a meaningful way. One way we categorize research is by time horizon. Does the research provide insights about expected returns over the next minute, the next month, or many years down the line? Thinking in terms of time horizons helps us increase the likelihood of expected returns and manage risk each day.

We categorize differences in company size, relative price, or profitability as long-term drivers—or dimensions—because these expected returns have tended to persist over many years. For example, a small company trading at a relatively low price with high profitability has a higher expected return than a large company trading at a higher price with low profitability.

While long-term drivers impact our strategic allocations, we use a daily process to add value in other ways. Some variables have information over the next few days or months, so we account for them when generating buy and sell orders. We also identify more buy and sell candidates with similar expected returns than we need each day in an effort to keep trading costs low. Our process affords us flexibility, unlike many index fund managers who are constrained in what securities to hold and when to trade them.  Thinking in terms of time horizons helps us increase the likelihood of expected returns and manage risk each day.

### Continuous focus on higher expected returns in equity markets

### Long Term

Use current data to assess differences in long-term expected returns each day.

*Company Size Relative Price Profitability* 

### Short Term

Balance long- and short-term premiums and costs when making buy, sell, or hold decisions.

Spread turnover across names and time.

Momentum Securities Lending

#### Intraday

Provide traders flexibility across names and time to minimize execution costs.

Participate in the natural liquidity of the market.

Trading Costs

## THE PURSUIT OF MORE

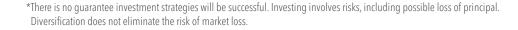
A well-diversified market portfolio can be a good portfolio for many investors.\* And while Dimensional seeks to outperform a market portfolio in many ways, returns are noisy and there can be periods of time when a particular driver doesn't deliver. We account for this when designing strategies. Our goal is to help investors benefit from dimensions when they are realized and offer marketlike returns when they fall flat. We are also candid about the range of potential outcomes. Markets may be disappointing at times, but we don't want investors to be surprised.

Our team processes millions of datapoints each day to help ensure portfolio decisions are based on current and useful information. In addition, we carefully manage responsibilities like corporate actions—such as stock splits, mergers, or spinoffs—to make the most of the securities owned. By starting with the market and adding value through robust daily processes, our goal is to help minimize risk and increase the likelihood of a good outcome.

 Our team processes millions of datapoints each day to help ensure portfolio decisions are based on current and useful information.







### DELIVERING RESULTS

When considering Dimensional or any money manager, it's helpful to evaluate how well they've performed—not just in one or two handpicked strategies but across a broad range and over the longest time period available. Did they deliver what they said they'd deliver? Did they remain consistent in their approach? Have their solutions survived the test of time? And why should you have confidence they can repeat any success?

We apply one philosophy and have strategies dating back decades including some that have been serving investors for almost 40 years. Through time, we've experienced a wide range of market conditions, and clients have stayed with us. A track record this long is revealing and reinforces the importance of having an investment philosophy you can stick with.

We recognize that every dollar invested with us represents the hard work, savings, and dreams of investors all around the world. To deliver a better investment experience, we use our accumulated expertise, judgment, and skill to pull the right levers at the right time. *That's the Dimensional difference*. By the numbers as of December 31, 2018

199 INVESTMENT VEHICLES

47 COUNTRIES INVESTED IN

6.5K AVERAGE TRADES DAILY

500M+

There is no guarantee investment strategies will be successful. Investing involves risks, including possible loss of principal. Diversification does not eliminate the risk of market loss. This information is provided for educational purposes only and should not be considered investment advice or a solicitation to buy or sell securities.

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